oil and whiskey, in equal proportions, in all cases where simply abdominal and intestinal derangements occur from toadstool eating.

The remaining family of toadstools, the Agaricini, or gill-bearing, has more members than the sum of all the others of which individuals are eaten. To it belong the common mushrooms, Agricus campestris and Agricus arvensis, together with many other members possessing high flavor and excellent qualities.

It is from this family that the masses gather for their tables, and in this family that real danger from toadstool poisoning exists. It contains a small genus consisting of about thirty members, known as AMANITA, eight of which are known to be edible, and at least five to contain a deadly alkaloid, designated under the several names of Muscarine, Bulbosine and Amanitine.

This genus has distinguishing marks which cannot be mistaken, and should be known by everyone. All of its members have gills which, with one exception, an edible variety having yellow gills—Amanita caesaria—are white at all stages of their growth. Their caps, which are convex, concave, or umbonate, generally show remains of an investing membrane existing as warts, scruff, or scales, which are easily removable by rubbing, and leave the smooth, satin-like skin intact. The flesh is white, tasteless, and almost scentless in young specimens. In older specimens, or soon after gathering, a strong and unpleasant odor generates.

(To be continued.)

NEW LITERATURE.

BY W. A. KELLERMAN.

"UBER DAS VERSCHWINDEN GEWISSER INSEKTEN INFOLGE DER EINWANDERUNG DER PUCCINIA MALVACEARUM, MONT." VON Dr. F. Ludwig, in Greiz. Hedwigia, 1885, Heft V.

This parasite appeared first in 1875, in Elsterthal, near Greiz, on the wild Malvas. In the following year it spread rapidly, and attacked also the cultivated species of Malva. Such davastation ensued that Dr. Ludwig in 1882 urged the adoption of ordinances looking to the destruction of the parasite. These were not as effectual as desired, and at present, in many places the cultivated species, as well as the wild species, M. neglecta and M. sylvestris, have disappeared in consequence. A similar case was reported to Dr. Ludwig by Dr. J. G. Otto Tepper, of Norwood, in South Australia. A few years ago, the Puccinia malvacearum found its way to this part of Australia. The Lavatera plebeja flourished there exuberantly at the time, but now is seldom seen. Curiously enough, however, Malva rotundifolia has taken its place in spite of the parasite. With Lavetera, have also disappeared certain insects

that visited its flowers in myriads, notably a beautiful metallic beetle, Lamprima. In Europe, there are several insects that derive their nourishment, partly or wholly, from species of Malvaceæ; for example, Haltica malvæ, H. fuscipes, H. fuscicornis, Apion malvarum, A. malvæ, A. æneum, A. radiolus, Lixus augustatus, Hesperia malvarum, Ortholita cervinita, Gelechia malvella and Tortrix althæana. A thorough study will doubtless reveal the fact that certain insects have either entirely disappeared, or accommodated themselves to other plants, bringing injury or profit.

"MYKOLOGISCHE NOTIZEN." Von Dr. F. Ludwig. Irmischia, No. 10, 1885.

"AANWINNSTEN VOOR DE FLORA MYCOLOGICA VAN NEDERLAND." IX en X. Door C. A. J. A. Oudemans. Vervolg van Bijdrage VIII, in Ned. Kr. Arch. 2e Serie III, p. 236–257. Seventy-six pages; three plates.

The species number 230, accompanied by observations, and in many cases with the technical descriptions. Eighteen species are illustrated by lithographic figures. The new genera given are as follows:—

HYALOSTIBUM, Oudemans.—Stroma teretiusculum, nonnunmquam paulum complanatum, apice capitato-conidiophorum, e cellulis parenchymatosis (isodia-metricis fere) polygonis, achromis, hyalinis conflatum. Conidia minuta muco primitis obvoluta.

MONACROSPORIUM, Oudemans.—Mycelium repens vage et pluries ramosum, ramis septatis. Hyphæ conidiophoræ erectæ, achromæ, continuæ vel septatæ, apice unicum tantum conidium achromum septatum gerentes. Affinis gen. Pyricularia, Sacc. (Michelia II, 20) sed saprogenum.

"BEITRÆGE ZUR PILZFLORA VON MISSOURI." Von Dr. G. Winter und C. H. Demetrio. Serie I. Hedwigia, 1885, Heft V, Sept. u. Oct.

An enumeration of 350 species of fungi, collected by Rev. C. H. Demetrio, near Perryville, Mo. Dates, host-plants, also descriptions in Latin of new species, are given. See JOURNAL OF MYCOLOGY, Vol. I, pp. 121–6 for the new species.

"NEW BRITISH FUNGI," by M. C. Cooke, Grevillea, Dec., 1885.

"VALSA VITIS, AGAIN," by M. C. Cooke, l. c.

This is another attempt on the basis of authentic specimens from Schweinitz himself, to clear up all doubts as to Schweinitz's *Sphaeriae* of the vine. The synonomy is given as follows:—

DIATRYPE (VALSARIA) VITICOLA, Schw. Sphæria viticola, schw. Diatrype viticola, Berk. Valsaria viticola, Sacc. Syll., No. 2812.

VALSA (EUTYPELLA) VITIS (Schw). Sphæria vitis, Schw. Valsa vitis, Cke. Sphæria viticola, Mont. Eutypa viticola, Sacc. Syll., No. 669. Sphæria propagata, Plow. Cryptosphæria propagata, Sacc. Syll., No. 687.

VALSA VITIGERA, Cke. Valsa vitis, Fckl.

"SYNOPSIS PYRENOMYCETUM," l. c., continued from p. 17.

"FUNGI EUROPÆI ET EXTRAEUROPÆI," 34th Cent.

Dr. Winter gives in this Century 43 specimens of American species. Latin descriptions accompany the following new species: Aecidium Alliicolum, Winter, on Allium stellatum, Missouri; Uromyces affinis, Winter, I and III, on Hypoxis erecta, Missouri; Lizonia (?) inæqualis, Winter, Brazil; Pleospora pezizoides, Cesati, Italy; Valsaria stellulata, Romell, Sweden; Endoxyla Populi, Romell, Sweden; Uredo flavidula, Winter, Brazil; Blitridium (?) subtropicum, Winter, Europe; Meliola Niessleana, Winter, Europe; Nectria aureola, Winter, parasitic on the Meliola Niessleana.

The two American species are described as follows:—

AECIDIUM ALLIICOLUM, Winter.—Pseudoperidia dense stipata, acervulos elongatos, plerumgue caulem ambientes sæpeque eum parum tumefacientes formantia, breve cylindrica, sursum sæpe parum dilatata, marquine crenato, subinciso, erecto vel parum recurvato, albida, ca. .5 millim. alta. Sporæ rotundato-angulatæ, aurantiacæ, 21—26 *u* diam., minutissime et dense verruculosæ. Ad folia scaposque vivos Allii stellati. Perryville, Mo., Mai, 1883, leg. C. H. Demetrio.

UROMYCES AFFINIS, Winter.—I Aecidium: Pseudoperidia gregaria, acervolos rotundatos vel plus minusve elongatos, sæpe laxos formantia, brevissime cylindrica vel fere patellæformia, margine inciso, erecto, albida ca. .25 millim. alta. Sporæ rotundato-angulatæ, aurantiacæ, minutissime verruculosæ, 17—23 *u* diam. — III, Teleutosporæ: Acervuli sparsi v. gregarii, non raro confluentes, elliptici vel plus minusve elongati, primo epidermide tecti, demum erumpentes, pulveracei, fusci. Sporæ ovatæ, ellipsoideæ vel oblongae, non raro irregulares vel pyriformes, membrana tenuissima aequali, ad apicem vel laterale (plerumque) apiculo brevi, conico, subhyalino, praeditae, fuscae, 24—30 *u* longae, 14—21 *u* crassae, episporio longitudinaliter striato, pedicello sublongo, valde fragili, hyalino suffultae. In foliis scapisque vivis Hypoxidis erectae, Perryville, Mo., Mai, 1883, leg. C. H. Demetrio.

Observ.: Diese Art steht in der Teleutosporenform dem Uromyces Erythronii, DC. sehr nahe, der sich wessentlich nur durch etwas grossere, Sporen auszeichnet, Dagegen sind die Aecidien beider Arten ganz verschieden. Mit Uromyces Hypoxides, Cooke, in Grevillea X, p. 127, hat unsere Art nichts gemein.

CORRECTION.—On p. 152 (Vol. I), in the note after Patellaria subvelate, E. & E., instead of *preceeding*, read *following*.